feeling so as not to empathize with the user's feeling. The internal state management unit **110** rather manages the robot **20**'s feeling so as to react against the user, thereby allowing the user to realize that the user should treat the robot **20** more carefully.

[0055] Therefore, even if the evaluation value of the "joy" index of the user who has got a home run is updated to positive, the internal state management unit **110** updates the evaluation value of the "joy" index of the robot **20** to negative. If the robot **20**'s popularity rating for the user is negative, the internal state management unit **110** updates the evaluation value of the robot **20**'s feeling to a value opposite to the evaluation value of the user's feeling. Therefore, if the feeling evaluation value of the user is positive, the feeling evaluation value of the robot **20** may updated negative. If the feeling evaluation value of the user is negative, the feeling evaluation value of the robot **20** may be updated positive.

[0056] Upon updating the internal state of the robot **20**, the internal state management unit **110** provides the action management unit **120** with trigger information indicating that it is time to determine the action of the robot **20**. Accordingly, the action management unit **120** determines the action including the audio output of the robot **20** on the basis of the internal state of the robot **20** updated in the object internal state storage unit **132**, specifically, the negative evaluation value of the "joy" index. For example, the action management unit **120** may not generate the contents of the speech (i.e., ignore the user), and may determine the action as the movement of the robot **20** to turn in the opposite direction to the user (turn to the other side). These contents of the action are notified to the output processing unit **140**, and the output processing unit **140** causes the robot **20** to perform the action determined by the action management unit **120**.

[0057] Seeing this action of the robot **20**, the user notices that the robot **20** is not pleased with the user this time, although the robot **20** was pleased together before. The user looks back at the user's own attitude and recognises that the robot **20** is not pleased together with the user because of the user's cold contact with the robot **20**. By causing the robot **20** to react against the user by dare, an opportunity for the user to keep in mind to gently treat the robot **20** from now on is given to the user.

[0058] Thus, in the object control system **1**, the relationship between the user and the robot **20** is managed in the same manner as the human relationship in an actual human society. In the communication between people in real world, a good relationship is generated by coming in contact with each other with consideration for each other. If one is not considerate, the other will not be able to be considerate. In the object control system **1**, this considerateness is expressed by the feeling of the "love" index, and the human relationship through the considerateness is expressed by the "popularity rating" index. Therefore, the evaluation value of the user's popularity rating in the object control system **1** and the evaluation value of the robot **20**'s popularity rating also tend to be linked. In a case in which the robot **20**'s popularity rating for the user is lowered, the evaluation value for the popularity rating for the user is improved from negative to positive by the user coming in contact with the robot **20** with more consideration, and then, the user may get again the joint viewing experience together with the robot **20**.

[0059] The robot **20** may be a kind of a friend by increasing the user's affinity with the robot **20**. If the user is living an irregular life, the robot **20** may propose improvement of the life rhythm, for example, saying "Let's go to bed soon" and such a case that the user listens to and accepts the robot **20** as advice from a friend may be also considered in the future. In order to achieve such case described above, constructing a mechanism to increase the user's affinity with the robot **20** through the joint viewing experience with the robot **20** also leads to expanding the future possibilities of the robot **20**.

[0060] Note that, in the above-described embodiment, although the mechanism is proposed in which the user obtains the joint viewing experience with the robot **20** being an actual object, a mechanism for obtaining the joint viewing experience between the virtual objects may be similarly constructed.

[0061] In this case, the virtual object may be a character such as a person or a pet including the 3D model, and exists in the virtual space generated by the computer. In the embodiment, in the virtual space constructed when the user wears the HMD, the mechanism is proposed in which the contents are reproduced in front of the user, and when the user turns sideways, the user may see how the virtual character is viewing the content together with the user. Similarly to the robot **20**, the virtual character also communicates with the user by outputting the reaction to empathize with the user or outputting the reaction against the user conversely.

[0062] FIG. **5** illustrates a diagram of an example of the appearance form of the HMD **200**. The HMD **200** includes an output mechanism unit **202** and a mounting mechanism unit **204**. The mounting mechanism unit **204** includes a mounting band **206** for fixing the HMD **200** to the head by circling the head with being worn by the user.

[0063] The output mechanism unit **202** includes a housing **208** shaped to cover the left and right eyes in a state where the user wears the HMD **200**, and internally includes a display panel which is located opposed to the eyes at the time of wearing. The display panel may be a liquid crystal panel or an organic electroluminescence (EL) panel. The housing **208** further includes a pair of left and right optical lenses located between the display panel and the user's eyes and enlarging a viewing angle of the user. The HMD **200** may further include a speaker or an earphone at a position corresponding to the user's ear and may be configured to be connected with an external headphone. In addition, a camera that photographs the face of the user is provided inside the housing **208** and is used to detect a facial expression of the user.

[0064] On an outer surface of the housing **208**, light emission markers **210***a*, **210***b*, **210***c*, and **210***d* are provided, which are tracking light emitting diodes (LEDs). The light emission marker **210** is photographed by the camera **14**, and the information processing apparatus **10** analyzes a position of each marker. Further, a posture sensor (acceleration sensor and gyro sensor) is mounted on the HMD **200**. The HMD **200** is connected to the information processing apparatus **10** by a known wireless communication protocol, and transmits the sensor data detected by the posture sensor to the information processing apparatus **10**. The information processing apparatus **10** identifies a direction in which the HMD **200** faces on the basis of the photographed position of the light emission marker **210** and the sensor data of the posture sensor.